

We claim:-

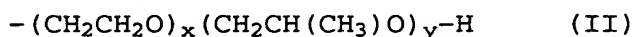
1. The use of an aqueous polymer dispersion comprising dispersed particles of at least one polymer A1 obtainable by free-radical emulsion polymerization in the presence of a polymer A2 synthesized from
 - from 50 to 99.5% by weight of at least one ethylenically unsaturated monocarboxylic and/or dicarboxylic acid,
 - from 0.5 to 50% by weight of at least one ethylenically unsaturated compound selected from the esters of ethylenically unsaturated monocarboxylic acids and the monoesters and diesters of ethylenically unsaturated dicarboxylic acids with an amine containing at least one hydroxyl group,
 - up to 20% by weight of at least one further monomeras a binder for producing filter materials.
2. The use of an aqueous polymer dispersion as claimed in claim 1, wherein the polymer A2 comprises as ethylenically unsaturated monocarboxylic and/or dicarboxylic acid at least one compound selected from C₃-C₁₀ monocarboxylic acids and C₄-C₈ dicarboxylic acids.
3. The use of an aqueous polymer dispersion as claimed in either of claims 1 and 2, wherein the amine containing at least one hydroxyl group is selected from amines of the formula (I)



where

R^c is C₆ to C₂₂ alkyl, C₆ to C₂₂ alkenyl, aryl-C₆-C₂₂ alkyl or aryl-C₆-C₂₂ alkenyl, the alkenyl radical having 1, 2 or 3 nonadjacent double bonds,

R^a is hydroxy-C₁-C₆ alkyl or a radical of the formula II



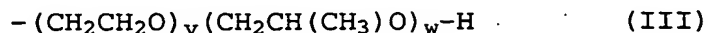
where

29

in the formula II the sequence of the alkylene oxide units is arbitrary and x and y independently are an integer from 0 to 100, the sum of x and y being > 1,

- 5 R^b is hydrogen, C_1 to C_{22} alkyl, hydroxy- C_1 - C_6 alkyl, C_6 to C_{22} alkenyl, aryl- C_6 - C_{22} alkyl, aryl- C_6 - C_{22} alkenyl or C_5 to C_8 cycloalkyl, the alkenyl radical having 1, 2 or 3 nonadjacent double bonds,
or R^b is a radical of formula III

10



where

- 15 in the formula III the sequence of the alkylene oxide units is arbitrary and v and w independently are an integer from 0 to 100,

and mixtures thereof.

- 20 4. The use of an aqueous polymer dispersion as claimed in any of claims 1 to 3, wherein the weight ratio of polymer A1 to polymer A2, based on solids, is from 9:1 to 1:9, preferably from 3:1 to 1:3.
- 25 5. The use of an aqueous polymer dispersion as claimed in any of claims 1 to 4, wherein additionally an alkanolamine having at least two hydroxyl groups is added as crosslinker.
- 30 6. The use of an aqueous polymer dispersion as claimed in any of claims 1 to 5, wherein following its preparation the aqueous polymer dispersion is adjusted to a pH of from 2 to 8 by addition of organic or inorganic bases.
- 35 7. The use of an aqueous polymer dispersion as claimed in any of claims 1 to 6, wherein the aqueous polymer dispersion is a mixture of one or more organic or inorganic co-components.
- 40 8. The use of an aqueous polymer dispersion as claimed in any of claims 1 to 7, wherein the aqueous polymer dispersion is applied to the filter materials by resinating in accordance with the impregnating method.
- 45 9. The use of an aqueous polymer dispersion as claimed in any of claims 1 to 8, wherein after the filter materials have been resinated the aqueous polymer dispersion is additionally heated at from 100 to 250°C for from 0.1 to 60 minutes.

30

10. The use of an aqueous polymer dispersion as claimed in any of claims 1 to 9 as a binder for producing filter materials.

11. Filter materials comprising an aqueous polymer dispersion as
5 set forth in any of claims 1 to 9.

10

15

20

25

30

35

40

45